

HOT MELT ADHESIVE SYSTEM WITH ULTRASONIC FILTER AND FILTERING METHOD

Abstract of the Disclosure

A liquid dispensing apparatus includes a manifold and an ultrasonic transducer. The manifold, itself, includes a liquid inlet, a liquid outlet, and a liquid passageway communicating with the liquid inlet and liquid outlet. Additionally, the ultrasonic transducer includes at least a portion that is located within the liquid passageway. The ultrasonic transducer can therefore apply ultrasonic energy on liquid that is traveling through the liquid passageway. The liquid dispensing apparatus can also include a filter located within the liquid passageway and the ultrasonic transducer is positioned to apply the ultrasonic energy before the liquid reaches the filter. In operation, ultrasonic energy is applied to a liquid stream to disintegrate particulate contaminants before they reach a dispensing orifice.